

ENVIRONMENTAL Fact Sheet



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Protection Programs Required for New Production Wells

Who Has to Meet This Requirement?

A community water supplier who is siting a new production well must develop a wellhead protection program for the new well. The wellhead protection program must be approved by the New Hampshire Department of Environmental Services before the new well is connected to the system.

Why Is It Required?

The purpose of wellhead protection programs is to prevent wells from becoming contaminated. Once a well becomes contaminated, it is very costly and sometimes impossible to correct. Because most communities are dependent on groundwater sources, preventing contamination is important. Wellhead protection programs for new production wells are required by New Hampshire Administrative Rules Env-Ws 378 and 379.

What Does a Wellhead Protection Program Consist Of?

A wellhead protection program has three parts: delineation, inventory and management. For a well withdrawing less than 57,600 gallons per day a delineation and inventory, and educational program must be completed. For wells producing more than this, land use monitoring must be done.

Delineation – The wellhead protection area (the area from which groundwater may travel to the well) is mapped according to procedures spelled out in Env-Ws 378 and 379.

Inventory – Within the wellhead protection area, an inventory of potential contamination sources (PCSs) is prepared. PCSs are human activities that involve significant quantities of regulated substances (see list at right).

Management – For large wells, surveys of certain PCSs must be conducted to ensure that they are storing and handling materials in such a way as to minimize the risk of groundwater contamination. Best Management Practices for Groundwater Protection, Env-Wq 401, spells out the storage and handling requirements (See fact sheet WD-DWGB-22-4 “Best Management Practices for Groundwater Protection”).

Potential Contamination Sources (PCSs)

- Vehicle service and repair shops*
- General service and repair shops*
- Metalworking shops*
- Manufacturing facilities*
- Underground and aboveground storage tanks
- Waste and scrap processing and storage*
- Transportation corridors
- Septic systems (at commercial and industrial facilities)
- Laboratories and certain professional offices (medical, dental, veterinary)*
- Use of agricultural chemicals**
- Salt storage and use*
- Snow dumps
- Stormwater infiltration ponds or leaching catch basins
- Cleaning services*
- Food processing plants*
- Fueling and maintenance of earth moving equipment*
- Concrete, asphalt, and tar manufacture*
- Cemeteries
- Hazardous waste facilities*

* PCS categories subject to BMP inspections.

** Subject to BMPs developed and administered by N.H. Dept. of Agriculture, Markets, and Food.

What Must a Management Program Consist Of?

As part of the approval process for a new production well, DES requires the water supplier to submit a description of the PCS management program and a schedule for implementation. The program description should include a description of what will be done, who will do it, and when. Specifically, each of the following items should be included.

- **Inventory Update.** A statement as to how frequently the inventory of PCSs will be updated. It must be updated at least once every three years.
- **Education.** The educational mailing for PCSs should consist of a cover letter, *Clean Drinking Water is Up to You* pamphlet, a copy of Env-Wq 401, and fact sheets WD-DWGB-22-4 “Best Management Practices for Groundwater Protection,” WD-DWGB-22-20 “Preventing Groundwater Contamination at Gas Stations-What Municipalities and Water Suppliers Can Do,” and if appropriate, WD-DWGB-22-6 “Best Management Practices for Fueling and Maintenance of Excavation and Earthmoving Equipment.” The mailing to residents and non-PCS businesses should include a cover letter (a form letter is available from DES), *Clean Drinking Water is Up to You* pamphlet, and fact sheet WD-DWGB-22-20 “Preventing Groundwater Contamination at Gas Stations-What Municipalities and Water Suppliers Can Do.” Provide a schedule that ensures that materials will be mailed or hand-delivered within three months of new well approval or within 90 days of system start-up in the case of new water systems, and at least once every three years.
- **Surveys.** For large wells, a statement as to what authority, if any, the water supplier intends to rely on to conduct the PCS surveys, a schedule for putting that authority in place, and a description of the process that will be followed if compliance is not achieved. A schedule for PCS surveys and identification of the persons responsible (name, title, affiliation) for the survey program. Each PCS subject to the survey program must be inspected at least once every three years. There are three options for obtaining authority:
 - *Local health regulation or health ordinance.* If the municipality is willing, a local health regulation can be adopted by the health officer and approved by the board of selectmen (in towns) or adopted by the city council (in cities) to give the local health officer the ability to conduct inspections and enforce Env-Wq 401. (A model is available from DES).
 - *Groundwater Reclassification.* Under RSA 485-C, a water supplier or municipality may apply to DES to reclassify certain local groundwater resources. If approved, this gives the local entity the authority to conduct inspections and enforce Env-Wq 401.
 - *Voluntary Inspections.* If the wellhead protection area contains only a few PCSs, the water supplier could conduct the inspections in instances where the PCS owner voluntarily allows access. If the local inspector is denied access, the situation can be referred to DES. In either case, any necessary enforcement action is handled by DES.

For Additional Information

For more information on best management practices for groundwater protection, visit the DES Drinking Water Source Protection webpage at <http://des.nh.gov/organization/divisions/water/dwgb/dwspp/index.htm>, or call (603) 271-2947 or (603) 271-0688.

DES provides the following assistance in developing acceptable management programs:

- Consultations to explain and evaluate the options.
- Form letters and fliers to use.
- Sample health regulations.
- Training in how to conduct an inspection program and achieve compliance with BMPs.

For additional information, please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit our website at <http://des.nh.gov/organization/divisions/water/dwgb/index.htm>. All of the bureau's fact sheets are on-line at <http://des.nh.gov/organization/commissioner/pip/factsheets/dwgb/index.htm>.

Note: This fact sheet is accurate as of November 2008. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.